REMARKS

Claims 1, 3-11, and 13-20 are rejected in the application. Claims 1, 10, and 20 have been amended. Claim 21 has been added. Claims 2 and 12 were previously canceled. Claims 1, 3-11, and 13-21 remain in the application. It is respectfully submitted that no new matter has been added.

Claim Rejections under 35 U.S.C. § 103

Claims 1, 3-11 and 13-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kimura et al., U.S. Patent No. 6,105,127 (hereinafter "Kimura") in view of Hewitt et al., U.S. Patent No. 6,339,808 (hereinafter "Hewitt") in view of Borkenhagen et al., U.S. Patent No. 6,567,839, (hereinafter "Borkenhagen").

As recited in independent claims 1, 11, and 20, a counter is provided that has a value selected depending on the priority assigned to the thread. In one embodiment, the counter value can bet set high when a high priority is given to a thread, and set to a low value when a low priority is given to a thread. The cited references fail to teach or suggest this feature of the independent claims.

As stated in the response to the previous Office Action, Kimura and Hewitt do not show this feature. It would appear that the Examiner agrees with this (see Page 4, lines 1-3 of the current Office Action). The newly-cited Borkenhagen reference fails to make up for the deficiencies of the Kimura and Hewitt references. The Office Action states that "[Borkenhagen] discloses a thread switch control technique having a counter with the predetermined value for plurality of threads depending on the priority assigned to each thred [col. 5, lines 32 – col. 6, line

11]." A review of this text shows that there is no teaching or suggestion that a counter-value is set depending on a priority of the thread as recited in the claims.

In the paragraph beginning at Col. 5, lines 32, Borkenhagen discloses a thread switch counter. By switching priority between threads, "thrashing" may occur. When this does occur, thread priority is repeatedly being switched between thread without any instructions actually being executed. To combat this, the thread switch counter counts the number of times control switches between threads without an instruction having been executed. When the threshold is exceded (e.g., say after 10 such switches), then thread switching is prevented to enable instruction execution.

In the paragraph beginning at Col. 5, line 50, a feature is described that makes sure an excessive amount of time of thread inactivity is avoided. Thus, if thread 0 is inactive for 100 clock cycles, the thread switch counter would initiate a forced thread switch to thread 1 (for example).

In the paragraph beginning at Col. 5, line 62, hardware registers are provided for storing thread states, thread priority, and thread switch conditions.

In the final paragraph of this section, beginning at Col. 5, line 66, it states that the thread priority for a thread may be altered by processing an interrupt request or software instruction. By forcing a change in thread priority, the higher priority thread would be given greater access to processing cycles.

In none of the cited sections, does Borkenhagen teach or suggest that a counter value is selected based on the priority level for the thread. Instead, Borkenhagen describes other aspects of thread priority (e.g., avoiding excessive thread switching). Though Borkenhagen describes providing a counter for thread inactivity, there is no suggestion that the counter value for such a

counter is selected based on the priority assigned to the thread as called for in each of the pending claims.

Based on the amendments and arguments above, reconsideration and withdrawal of the rejection of claims 1, 3-11, and 13-20 under 35 U.S.C. § 103(a) is respectfully requested. Allowance of new claim 21, which depends from and further defines claim 20, is also respectfully requested.

CONCLUSION

For all the above reasons, the Applicants respectfully submit that this application is in condition for allowance. A Notice of Allowance is earnestly solicited.

The Examiner is invited to contact the undersigned at (202) 220-4255 to discuss any matter concerning this application. The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. §1.16 or §1.17 to Deposit Account No. **11-0600**.

Respectfully submitted,

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